

PRC Environmental Management, Inc.
233 North Michigan Avenue
Suite 1621
Chicago, IL 60601
312-856-8700
Fax 312-938-0118

EPA Region 5 Records Ctr.



393266



**PRELIMINARY ASSESSMENT/
VISUAL SITE INSPECTION**

**REFLECTOR HARDWARE CORPORATION
SPACEMASTER
MELROSE PARK, ILLINOIS
ILD 005 129 457**

FINAL REPORT

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460**

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PRC No.	:	309-R05032IL87
Prepared by	:	PRC Environmental Management, Inc. (Judy Wagner)
Contractor Project Manager	:	Shin Ahn
Telephone No.	:	(312) 856-8700
EPA Work Assignment Manager	:	Kevin Pierard
Telephone No.	:	(312) 886-4448

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EXECUTIVE SUMMARY

PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Reflector Hardware Corporation - Spacemaster (RHC) facility in Melrose Park, Cook County, Illinois. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs and AOCs identified.

The RHC facility manufactures metal store fixtures and shelving from cold rolled sheet or coiled steel. The facility currently generates and manages the following waste streams: nonhazardous waste paint sludge; nonhazardous waste paint filters; waste hydrochloric acid (D002 and D007); electroplating waste (F006); electroplating sludge (F006); waste plating solutions (uncharacterized); nonhazardous rinse water; nonhazardous scrap metal; nonhazardous waste oil; nonhazardous paper and cardboard waste; and nonhazardous baghouse dust. In the past, the facility generated and managed waste paint sludge (D001); 1,1,1-trichloroethane (TCA) (F001); spent cyanide (F007); plating bath residue (F008); spent metal stripping and cleaning bath solutions (F009); cyanide salts (P030); sodium cyanide (P106); zinc cyanide (P121); TCA still bottom waste (F001); tank cleaning water (D008); and flammable liquid (D001). The facility has operated at its current location since 1958. The facility occupies 16.5 acres in an industrial area and employs about 200 people. The facility's current regulatory status is that of a large-quantity generator of hazardous waste. In 1985, the facility began using water-based paints, eliminating hazardous waste paint sludge (D001) and TCA (F001). In 1988, the facility eliminated the use of cyanide-containing plating solutions.

RHC has been the sole owner and operator at the facility. Current operations at the facility are the same as past operations except for a change in the raw materials used. The facility listed two process codes on its Part A permit application, they were S01 and T04. The S01 code referred to the Former Container Storage Area (CSA) (SWMU 1), which was RCRA closed in 1986. The T04 code referred to a cyanide destruction tank, which was part of a waste water treatment system and was improperly included on the application.

The PA/VSI identified the following 13 SWMUs and 2 AOCs at the facility:

Solid Waste Management Units

1. Former CSA
2. Paint and Solvent Waste Accumulation Areas
3. Still Bottom Satellite Accumulation Area (SAA)
4. Refuse Dumpster
5. Plating Sludge Storage Room
6. Trench System
7. Scrap Metal Gondola
8. Scrap Metal Dumpster
9. Waste Oil Storage Area
10. Former Incinerator
11. Evaporators
12. Former Cyanide Destruction Tank
13. Baghouses

Areas of Concern

1. Fuel Oil Underground Storage Tanks (UST)
2. Paint Room UST

The current potential for release from all SWMUs except SWMU 3 is low. The possibility that releases to environmental media occurred in the past is low for all SWMUs. SWMUs 3 and 4 have a moderate potential for release to air. AOCs 1 and 2 have a moderate potential for release to groundwater and on-site soils. Conclusions are discussed below.

All SWMUs have a low potential for release to groundwater. SWMUs 6 and 9 manage nonhazardous liquid wastes and SWMU 11 manages an uncharacterized waste. SWMU 3 currently manages waste as nonhazardous, but the waste may be improperly characterized. SWMU 12 managed cyanide-containing rinse water but was removed in 1988. All of these SWMUs are located indoors on concrete. AOCs 1 and 2 have a moderate potential for release to groundwater because closure documents do not indicate that pressure testing was conducted before the USTs were filled with pea gravel and closed. Closure of both AOCs occurred in 1986. AOC 1 was closed because water entered the tank contaminating the stored product solvent. Groundwater is not a source of water in the village of Melrose Park. No wells exist within 3 miles of the facility.

The potential for release to surface water is low for all SWMUs and AOCs. The facility manages liquid wastes indoors. The nearest surface water body is Addison Creek which is located 0.5 mile southwest of the facility and is used for recreation and drainage, and flows to the Des Plaines River. Water from the Des Plaines River is treated by the Metropolitan Water Reclamation District of Greater Chicago.

The potential for release to air is low for all SWMUs and AOCs except SWMUs 3 and 4. PRC noted a strong solvent odor in SWMU 3. The facility has an operating air permit, which includes SWMU 3. Outdoor SWMUs manage nonhazardous wastes. All containers were found closed at the SWMUs. However, SWMU 4 is an open dumpster. It accepts baghouse dust that may contain hazardous constituents which may become airborne if not contained. Both AOCs are located indoors under concrete. The nearest resident is within 0.1 mile from the facility.

The potential for release to on-site soils is low for all SWMUs. Outdoor SWMUs manage nonhazardous waste. AOCs 1 and 2 have a moderate potential for release because closure activities did not include soil sampling. Also, available closure documentation does not describe how associated piping was managed. The nearest sensitive environment, a seasonally flooded palustrine wetland, is located 0.4 mile southwest of the facility. Access to the facility is limited by a perimeter fence.

PRC recommends no further corrective action be taken for all SWMUs except SWMU 3. PRC recommends that the ventilation in SWMU 3 be improved. Also, the waste in SWMU 3 may not be properly characterized; the facility manages the waste in SWMU 3 as nonhazardous.

PRC recommends that closure documentation for AOCs 1 and 2 be obtained from the appropriate regulatory agency and reviewed. If documentation is not available, soil sampling around and under each UST should be conducted.

PRC recommends that EPA request a proper waste analysis of the waste paint sludge, and its individual components, which are managed as nonhazardous. Also, baghouse dust transferred to SWMU 4 should be in a container when placed in the Refuse Dumpster.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. R05032 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has usually exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading or unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release of hazardous waste or constituents to the environment has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where a strong possibility exists that such a release might occur in the future.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility
- Obtain information on the operational history of the facility
- Obtain information on releases from any units at the facility
- Identify data gaps and other informational needs to be filled during the VSI

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA
- Identify releases not discovered during the PA
- Provide a specific description of the environmental setting
- Provide information on release pathways and the potential for releases to each medium
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases

The VSI includes interviewing appropriate facility staff; inspecting the entire facility to identify all SWMUs and AOCs; photographing all visible SWMUs; identifying evidence of releases; making a preliminary selection of potential sampling parameters and locations, if needed; and obtaining additional information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Reflector Hardware Corporation - Spacemaster (RHC) facility (EPA Identification No. ILD 005 129 457) in Melrose Park, Cook County, Illinois.

The PA was completed on June 2, 1993. PRC gathered and reviewed information from the Illinois Environmental Protection Agency (IEPA), United States Geological Survey (USGS), the Federal Emergency Management Agency (FEMA), a National Wetland Inventory map, and from EPA Region 5 RCRA files. The VSI was conducted on June 9, 1993 and August 16, 1993. It included interviews with facility representatives and a walk-through inspection of the facility. PRC identified 13 SWMUs and 2 AOCs at the facility.

The VSI is summarized and 14 of the 18 inspection photographs are included in Appendix A. The photographs have been renumbered; thus, their numbers differ from the photograph numbers in the VSI field notes which are included in Appendix B.

2.0 FACILITY DESCRIPTION

This section describes the facility's location; past and present operations; waste generating processes and waste management practices; history of documented releases; regulatory history; environmental setting; and receptors.

2.1 FACILITY LOCATION

The RHC facility is located at 1400 N. 25th Avenue in Melrose Park, Cook County, Illinois. Figure 1 shows the location of the facility in relation to the surrounding topographic features (latitude 41° 53' 55" N and longitude 87° 51' 56" W [RHC 1980b]). The facility occupies 16.5 acres in an industrial area.

The facility is bordered on the north by Polychem Corporation and Power Cleaning Systems, Inc., on the west by Schoeps Ice Cream and Keller Plastics, Inc., on the south by Melrose Park village hall, and on the east by Dur-o-Lite, Inc., Melrose Mold & Machine, and a Clark service station.

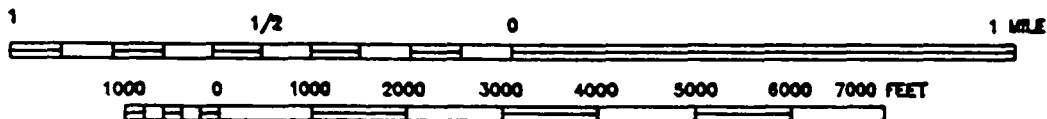
2.2 FACILITY OPERATIONS

The RHC facility manufactures metal store fixtures and shelving from cold rolled sheet or coiled steel. Steel parts are first punched and machined. They are then painted, plated, or left unfinished. The facility assembles, packages, and warehouses the final products in the facility. Raw materials, such as steel, paint, and plating materials are also maintained in the facility. Steel and paint are stored in the central storage area. Paint is stored in 55-gallon containers. Plating materials are stored in 55-gallon containers in the same room as the electroplating waste and sludge in SWMU 5, the Plating Sludge Storage Room. Past operations at the facility were the same as the current operations, however, the raw materials used in operations have changed.

Two spray paint booths, two conveyORIZED spray paint lines, and two automated dipping lines, which use high solids paint and water soluble lacquer, are operated at the facility. Solvent-based paint and lacquer were used before 1985. A mixture of toluene, methyl ethyl ketone, methyl isobutyl ketone,



SCALE 1:24000



SCALE 1"=2,000'



QUADRANGLE LOCATION

SOURCE: MODIFIED FROM USGS, RIVER FOREST AND ELMHURST
QUADRANGLES, 1972 AND 1980

REFLECTOR HARDWARE CORPORATION SPACEMASTER
MELROSE PARK, ILLINOIS

FIGURE 1
FACILITY LOCATION

PRC ENVIRONMENTAL MANAGEMENT, INC.

isopropyl alcohol, and butyl cellesolve is the solvent used to clean paint lines of the spray painting booths.

The facility currently operates two plating lines; one is a zinc-alkaline system and the other is an automated nickel-chromium (Ni-Cr) line. Hydrochloric acid used in the plating process is stored in an aboveground tank on the outside western wall of the building. Cyanide-containing plating solutions were eliminated in 1988. A barrel plating line was removed in 1986. Several wastes are generated from the painting and plating operations. These wastes are stored in the main building at the Paint and Solvent Waste Accumulation Areas (SWMU 2), the Still Bottom SAA (SWMU 3), and the Plating Sludge Storage Room (SWMU 5) or in the storage annex building in the Former CSA (SWMU1).

RHC has operated at the facility since September 1958 and employs about 200 people. RHC built the facility and has been the only owner and operator. Before RHC constructed the facility, the property was a swamp, according to the facility representatives.

The RHC facility consists of a 500,000-square foot building, a storage annex building, and a parking lot on 16.5 acres of property. All production and product warehousing occur in the main building. Nonhazardous paint wastes are managed in the storage annex building, the Former CSA (SWMU 1).

Three underground storage tanks (UST) were closed in place at the facility in 1986. All of these USTs are AOCs and are discussed in sections 2.5 and 4.0.

2.3 WASTE GENERATION AND MANAGEMENT

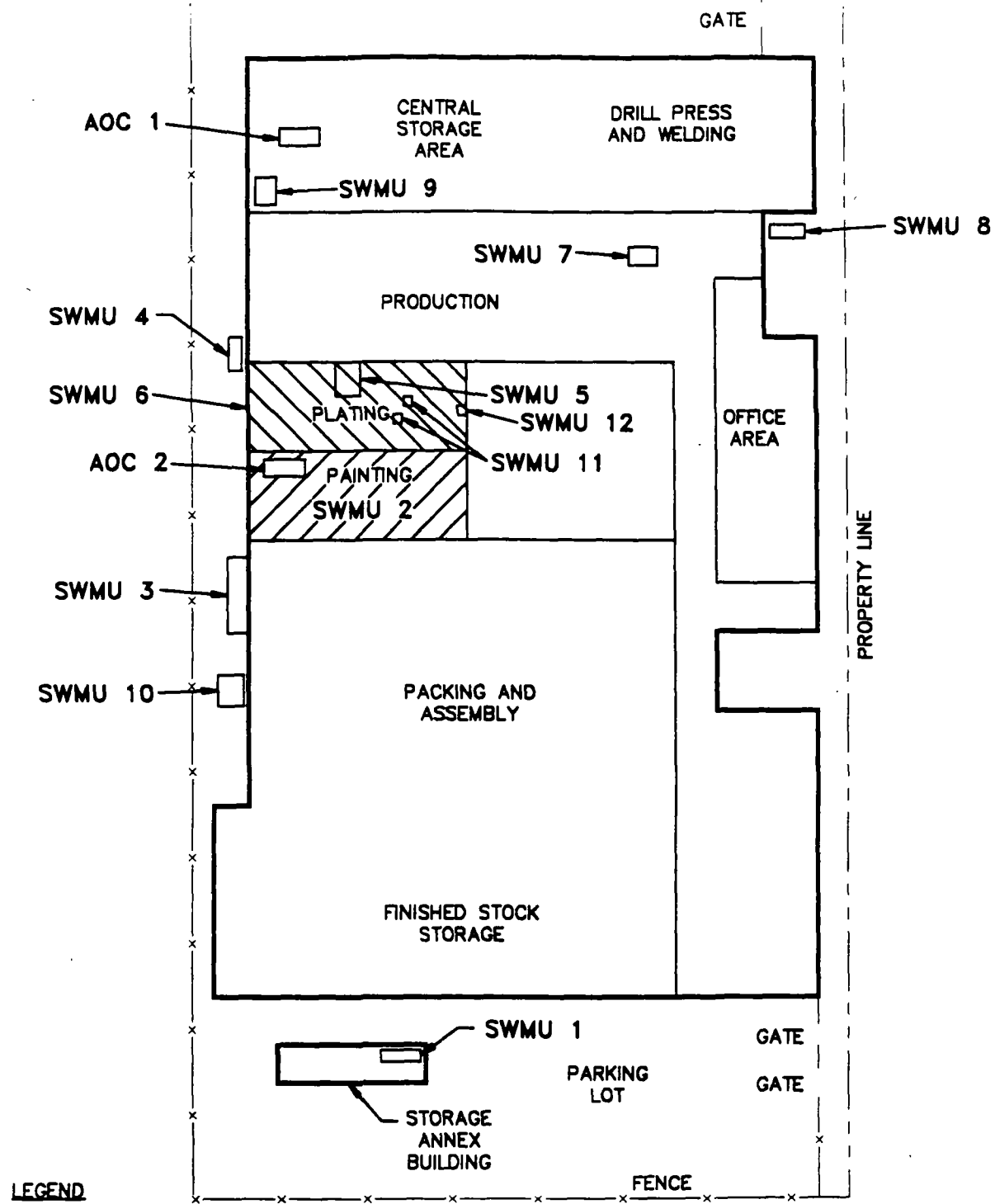
This section describes waste generation and management at the RHC facility. The facility's SWMUs are identified in Table 1. The facility layout, including SWMUs and AOCs, is shown in Figure 2. The facility's waste streams are summarized in Table 2. The following sections describe the facility's painting wastes, plating wastes, and other wastes.

TABLE 1
SOLID WASTE MANAGEMENT UNITS

<u>SWMU Number</u>	<u>SWMU Name</u>	<u>RCRA Hazardous Waste Management Unit^a</u>	<u>Status</u>
1	Former CSA	Yes	RCRA closed in 1986; currently manages nonhazardous waste
2	Paint and Solvent Waste Accumulation Areas	No	Active, manages nonhazardous waste paint and waste solvent
3	Still Bottom Satellite Accumulation Area	No	Active, manages still bottom waste
4	Refuse Dumpster	No	Active, manages nonhazardous refuse, waste paint filters, and baghouse dust
5	Plating Sludge Storage Room	No	Active, manages hazardous waste on a less than 90-day basis
6	Trench System	No	Active, manages rinse water from plating system
7	Scrap Metal Gondola	No	Active
8	Scrap Metal Dumpster	No	Active
9	Waste Oil Storage Area	No	Active
10	Former Incinerator	No	Inactive, removed in 1972
11	Evaporators	No	Active, for waste plating solutions from plating systems
12	Former Cyanide Destruction Tank	No	Inactive, removed in 1988
13	Baghouses	No	Active

Note:

^a A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.



LEGEND

- SWMU 1 FORMER CONTAINER STORAGE AREA
- SWMU 2 PAINT AND SOLVENT WASTE ACCUMULATION AREAS
- SWMU 3 STILL BOTTOM SATELLITE ACCUMULATION AREA
- SWMU 4 REFUSE DUMPSTER
- SWMU 5 PLATING SLUDGE STORAGE ROOM
- SWMU 6 TRENCH SYSTEM
- SWMU 7 SCRAP METAL GONDOLA
- SWMU 8 SCRAP METAL DUMPSTER
- SWMU 9 WASTE OIL STORAGE AREA
- SWMU 10 FORMER INCINERATOR
- SWMU 11 EVAPORATORS
- SWMU 12 FORMER CYANIDE DESTRUCTION TANK
- SWMU 13 BAGHOUSES
- AOC 1 FUEL OIL USTS
- AOC 2 PAINT ROOM UST

NOTE: SWMU 13 IS LOCATED THROUGHOUT THE FACILITY.

75' 0 75' 150'
SCALE: 1" = 150'

REFLECTOR HARDWARE CORPORATION SPACEMAKER
MELROSE PARK, ILLINOIS

**FIGURE 2
FACILITY LAYOUT**

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TABLE 2
SOLID WASTES

<u>Waste/EPA Waste Code^a</u>	<u>Source</u>	<u>Solid Waste Management Unit^{b, c}</u>
Nonhazardous waste paint sludge/NA	Paint waste, still bottom waste, caustic paint stripper sludge	1, 2, and 3
Waste paint filters/NA	Spray painting booths	4
Waste paint sludge/D001 ^d	Paint waste, caustic paint stripper sludge	1 and 2
1,1,1-Trichloroethane (TCA)/F001 ^d	Paint line cleaning, vapor degreaser	1, 2, and none
Waste hydrochloric acid/D002 and D007	Plating systems	None
Electroplating waste/F006	Plating systems	5
Electroplating sludge/F006	Plating systems	5
Waste plating solutions/uncharacterized	Plating systems	11
Rinse water/NA	Plating systems	6 and possibly 12
Spent cyanide/F007 ^d	Plating systems	Unknown
Plating bath residue/F008 ^d	Plating systems	Unknown
Spent metal stripping and cleaning bath solutions/F009 ^d	Plating systems	Unknown and possibly 12
Cyanide salts/P030 ^d	Plating systems	Unknown and possibly 12
Sodium cyanide/P106 ^d	Plating systems	Unknown and possibly 12
Zinc cyanide/P121 ^d	Plating systems	Unknown and possibly 12
Scrap metal/NA	Production	7 and 8
Waste oil/NA	Maintenance	9
Baghouse Dust/NA	Permitted air collection system	4 and 13
TCA still bottom/F001 ^d	Vapor degreaser	Unknown

TABLE 2
SOLID WASTES (Continued)

<u>Waste/EPA Waste Code^a</u>	<u>Source</u>	<u>Solid Waste Management Unit^{b, c}</u>
Paper and cardboard waste/NA	Paper and cardboard waste	10
Tank cleaning water/D008	UST closure	None, one-time generation
Flammable liquid/D001	UST closure	None, one-time generation

Notes:

- ^a Not applicable (NA) designates nonhazardous waste.
 - ^b "None" indicates that the waste stream is not managed on site.
 - ^c "Unknown" indicates that the waste was generated at the facility but that the SWMU that managed the waste cannot be determined.
 - ^d No longer generated by the facility.
-

2.3.1

Painting Wastes

Currently, waste paint sludge generated at the facility is managed as nonhazardous; however, this is a hazardous waste. The waste paint sludge is generated by combining several paint-related wastes including the following: (1) paint waste flushed out of the spray painting lines during cleaning, (2) still bottom waste from the distillation unit (at SWMU 3) used to reclaim spray line cleaning solvent, and (3) caustic stripper sludge which settles to the bottom of the paint stripper tank. Paint and solvent wastes are collected in 5-gallon pails. The pails are emptied into one of two 55-gallon drums, keeping the paint and solvent separate. The areas where the pails and drums are maintained make up the Paint and Solvent Waste Accumulation Areas (SWMU 2). The drum of waste paint is transferred to the Former Container Storage Area (CSA) (SWMU 1) where it is labeled waste paint sludge. The solvent waste, which is managed as nonhazardous waste, is transferred to a storage room where the Still Bottom Satellite Accumulation Area (SAA) (SWMU 3), which includes the facility's distillation unit, is located. Still bottom waste from the distillation unit is accumulated in 55-gallon drums before it is transferred to SWMU 1 where it is combined with the waste paint sludge.

Caustic stripper sludge is accumulated in 55-gallon drums and then transferred to SWMU 1 where it is also combined with the waste paint sludge. The facility generates 60 to 70 55-gallon drums of waste paint sludge each year. Browning Ferris Industries (BFI) transports the waste paint sludge to its Davis Junction site in Rockford, Illinois, for disposal. BFI sampled and analyzed this waste in January 1985 and determined it was nonhazardous (RHC 1987). PRC contacted RHC's solvent supplier and found that the solvent RHC purchases was reformulated after 1985. The solvent now used to flush the paint lines contains toluene, methyl ethyl ketone, methyl isobutyl ketone, isopropyl alcohol, and butyl cellosolve. The percentage by weight of each of these compounds is 2 to 3 percent (Pioneer Paint Products Company 1993). The remaining constituents were not listed on the solvent's material safety data sheet.

Nonhazardous paint filters are generated from overspray at the spray paint booths. The filters are allowed to dry, then they are disposed of in the Refuse Dumpster (SWMU 4) along with other refuse. The quantity of paint filters which are disposed of is unknown; however, the 20-cubic-yard dumpster is emptied each week. The waste in SWMU 4 is transported to Davis Junction in Rockford, Illinois, by BFI.

Before 1985, solvent-based paint and 1,1,1-trichloroethane (TCA) solvent were used at the facility. The facility representatives could not provide generation rates or disposal information for the hazardous paint waste sludge, which was manifested by the facility as D001. The waste TCA was reclaimed off site and was manifested as F001. These wastes were managed in the Former CSA (SWMU 1) and the Paint and Solvent Accumulation Area (SWMU 2).

2.3.2 Plating Wastes

Currently, waste hydrochloric acid (HCl) (D002 and D007), electroplating waste (F006), electroplating sludge (F006), and waste plating solutions are generated at both of RHC's plating lines. An HCl solution is used to clean metal parts before the actual plating process. When the HCl loses its effectiveness, Envirote Corporation (Envirote) pumps the waste HCl (D002 and D007) solution from tanks and transports it to its Harvey, Illinois, facility for treatment. Approximately 4,000 gallons of waste HCl is generated every 3 months and is transported by tank truck.

Electroplating waste (F006), a filter cake, is generated from the Ni-Cr plating system. The Ni-Cr plating solution is continuously filtered to remove iron. The resulting filter cake, the hazardous electroplating waste (F006), is managed in 55-gallon drums in the Plating Sludge Storage Room (SWMU 5). The filter is cleaned every 2 to 3 months and generates enough waste to fill two 55-gallon drums. The electroplating waste (F006) is transported off site by Clean Harbors of Kingston, Inc., to Clean Harbors of Braintree, Inc., Braintree, Massachusetts for treatment.

Electroplating sludge (F006) is the sludge that accumulates at the bottom of the plating lines. Drums of this waste are managed in the Plating Sludge Storage Room (SWMU 5). The facility generates about 11 drums of electroplating sludge (F006) every 3 months. Clean Harbors of Kingston, Inc., transports this waste to Clean Harbors of Braintree for treatment.

Waste plating solutions (uncharacterized) are treated in the Evaporators (SWMU 11). The solutions flow through SWMU 11, which evaporates the water, concentrating the plating solutions. The concentrated plating solutions are returned to the plating lines. Flow rates and the quantity of the waste plating solutions treated in SWMU 11 could not be provided by the facility representatives.

Rinse water used in both of the plating lines drains from the tanks into a Trench System (SWMU 6) in the floor. Rinse water is discharged from the facility by way of the sanitary sewers. The pH of

this rinse water is electronically monitored by the Village of Melrose Park on a continuous basis. The quantity of discharged rinse water could not be provided by the facility representatives.

Cyanide-containing plating solutions were eliminated in 1988. When cyanide was used, the facility also generated spent cyanide solution from electroplating (F007), plating bath residues (F008), spent metal stripping and cleaning bath solutions (F009), cyanide salts (P030), sodium cyanide (P106), and zinc cyanide (P121). The facility representatives could not provide generation rates or disposal information for these wastes. A Former Cyanide Destruction Tank (SWMU 12) was used at the facility before 1988 to destroy cyanide in rinse water; however, the facility representatives could not provide any specific information regarding this unit.

2.3.3 Other Wastes

Additional wastes generated at the facility included scrap metal, waste oil, baghouse dust, TCA, TCA still bottom (F001), paper and cardboard waste, tank cleaning water (D008), and flammable liquid (D001).

Scrap metal is generated by the punching and machining of metal parts. The scrap metal has a thin coating of lubricating oil. Scrap metal is collected in wooden gondolas at several production machines, then it is transferred to a larger container at the Scrap Metal Gondola (SWMU 7). When SWMU 7 is full, it is transferred to the Scrap Metal Dumpster (SWMU 8) and emptied. The facility generates 40 cubic yards of scrap metal each week. The scrap metal is transported to the Cozzi Iron and Metal, Inc. (Cozzi), facility in Chicago, Illinois, for recycling.

Nonhazardous waste oil is generated when the facility changes the oil in forklifts and production equipment. Waste oil is managed in 55-gallon drums in the Waste Oil Storage Area (SWMU 9). The facility does not routinely dispose of its waste oil and does not have an arrangement with a transporter or disposal facility. At the time of inspection, 15 drums of waste oil were on site, four of which were in SWMU 9.

Nonhazardous baghouse dust from the permitted Baghouses (SWMU 13) is emptied once per month, generating less than a 15-gallon container of waste. This dust is transferred to the Refuse Dumpster (SWMU 4) for disposal by BFI at Davis Junction in Rockford, Illinois. Facility representatives were unsure if the dust was or was not in a container when placed in SWMU 4.

In December 1991, the facility discontinued the use of a vapor degreaser. The degreaser used TCA to remove the oil coating on small parts. The degreaser unit consisted of a 4-foot by 4-foot by 16-foot steel tank with a distillation system built into it. One 55-gallon drum of TCA still bottom waste (F001) generated at this unit was removed once every 2 years when the degreaser was operated. The facility representatives could not provide any information regarding on-site management or off-site disposal of the TCA still bottom waste. Clean Harbors of Kingston, Inc., removed 110 gallons of waste TCA (F001) from the degreaser one year after use and transported it to Clean Harbors of Chicago, Inc., in Chicago, Illinois, for fuel blending.

In the past, paper and cardboard waste was managed in the facility's Former Incinerator (SWMU 10). SWMU 10 was removed in 1972. No other information regarding this unit is available.

Closure of the Fuel Oil UST (AOC 1) generated 12,000 gallons of tank cleaning water (D008) and 31,100 gallons of flammable liquid (D001). The tank cleaning water was transported by American Waste Haulers to ChemClear in Chicago, Illinois. SET Environmental, Inc. (SET), transported 31,100 gallons of flammable liquid (D001) to LWD, Inc. (LWD), in Calvert City, Kentucky.

2.4 HISTORY OF DOCUMENTED RELEASES

There is no history of documented releases at the RHC facility.

2.5 REGULATORY HISTORY

RHC submitted a Notification of Hazardous Waste Activity form to EPA on July 31, 1980 (RHC 1980a). RHC submitted a RCRA Part A permit application on November 10, 1980 (RHC 1980b). This application listed S01 and T04 process codes for a 6,600 gallon capacity and a 4,000 gallon per day capacity, respectively. The S01 code referred to SWMU 1, the Former CSA. The T04 code referred to a Former Cyanide Destruction Tank (SWMU 12) which was part of an exempt waste water treatment system (WWTS) and was improperly listed on the application. The application listed F001, F006, F008, F009, P030, P106, P121, U226, and F017 EPA waste codes.

RHC closed its S01 container storage unit, the Former CSA (SWMU 1). On March 18, 1987, IEPA acknowledged and approved receipt of the SWMU 1 closure certification, and withdrew RHC's Part

A permit application (IEPA 1987b). The facility currently operates as a large-quantity generator storing hazardous waste for less than 90 days.

In the past, RHC had RCRA compliance problems. These violations, observed during three inspections conducted by IEPA in 1982, 1986, and 1987, pertained to deficiencies such as lack of waste analysis, inspection, and operating records; lack of personnel training records; lack of an emergency coordinator; and lack of closure and contingency plans (IEPA 1982, 1986a, 1987a). IEPA conducted a record review in 1985. Violations found during the record review pertained to the closure plan. Response by RHC to a 1982 compliance inquiry letter (CIL) indicated that the violations had been corrected. However, during the 1986 inspection, IEPA found continuing violations from 1982 and 1985. IEPA then referred the matter to EPA for enforcement action (EPA 1986b).

EPA issued a compliance order on December 17, 1986. A consent agreement and final order were signed on January 25, 1988 (IEPA 1988). Violations from the 1987 inspection were resolved (IEPA 1987c).

The facility is required to have an operating air permit. IEPA issued an operating air permit (No. 031186ABI) to RHC on May 21, 1992 (IEPA 1992c) for equipment consisting of the following:

- 28 gas-fired space heaters
- Two gas-fired Pacific boilers
- Polishers with three cyclones (SWMU 13)
- Grinders with one cyclone (SWMU 13)
- One degreaser (use discontinued in 1991)
- Ten paint spray booths (two in use) with five ovens (this includes the conveyORIZED spray paint lines)
- Two dip coaters with two ovens
- One solvent recovery unit (distillation unit associated with SWMU 3)
- Two plating lines with one bake oven (includes exhaust from SWMU 11)

The facility has violated its air permit. IEPA issued a CIL in February 1989 to RHC for operating without an operating permit (IEPA 1989) and a CIL in March 1991 for excess volatile organic carbon (VOC) emissions (RHC 1991). A January 1992 permit application was denied because it indicated excess VOC emissions (IEPA 1992a). The facility operated under the denied permit until May 1992 (IEPA 1992b). The facility has no history of odor complaints from area residents.

RHC does not have any NPDES or other discharge permits. However, the pH of water discharged from the facility is electronically monitored by the Village of Melrose Park on a continuous basis.

The facility has three USTs which were closed in place in 1986. The USTs include two 20000-gallon Fuel Oil USTs (AOC 1) and an 1100-gallon Paint Room UST (AOC 2). Originally, AOC 1 held fuel oil for the facility's boilers. It then stored product solvent. AOC 2 was designed to hold flammable nitrocellulose lacquer. An on-ground lacquer dipping tank could empty into AOC 2 in the event of a fire at the facility. AOC 2 was never used for an emergency according to the facility representatives; however, it could not be confirmed that the UST was never used for other purposes.

PRC reviewed the purchase order agreement between RHC and American Waste Processing, Ltd., RHC's UST contractor, and found that two 20000-gallon USTs were closed in 1986 by the following:

- All liquids were removed.
- Each tank was cleaned and triple rinsed (Certificate of Cleaning was issued by New Process Tank Systems of Brookfield, Illinois).
- Each tank was filled with pea gravel.
- Concrete floors were refinished.

The purchase order does not indicate that the tanks were pressure (leak) tested (RHC 1986). AOC 1 was closed because water entered the USTs through its manhole-like cover contaminating the solvent. Also, the facility reduced the quantity of solvent used in production by using high solids paint. Therefore, the USTs were no longer needed. AOC 2 was closed because the facility stopped using lacquer in its production process.

2.6 ENVIRONMENTAL SETTING

This section describes the climate; flood plain and surface water; geology and soils; and groundwater in the vicinity of the facility.

2.6.1 Climate

Cook County has a continental humid climate with some influence from the Great Lakes. The average daily maximum temperature is 72 °F in July, and the average daily minimum temperature is 49 °F in January (USDA 1976). The total annual precipitation for the county is 33.4 inches. Total annual snowfall is 39 inches (USDA 1976). The mean annual lake evaporation is approximately 30 inches. The 1-year, 24-hour maximum rainfall for the area is approximately 4.25 inches (USDA 1976). The average wind speed for the area is 18.4 knots. Wind is from the north northeast in the winter and from the south in the summer (U. S. Department of Commerce 1980).

2.6.2 Flood Plain and Surface Water

The RHC facility is not located in a 100- or 500- year flood plain area (FEMA 1981).

The nearest surface water body, Addison Creek, is located 0.5 mile southwest of the facility and is used for recreational and drainage purposes. Addison Creek flows to the Des Plaines River.

All surface water runoff in the Village of Melrose Park is managed by storm sewers. Storm sewers discharge to Silver Creek which flows to the Des Plaines River. Water from the Des Plaines River is treated by the Metropolitan Water Reclamation District of Greater Chicago (PRC 1993).

2.6.3 Geology and Soils

Urban land-Milford soils predominate under the area of the site. Urban land soils are soils that have been significantly altered and obscured by buildings and other structures. It is generally assumed that 50 percent of the soils in the vicinity of the site are of the Milford series. The Milford soils are poorly drained and have a surface layer of silty clay loam. They have a seasonal high water table and a medium to low compressibility when wet. The thickness of the soil is approximately 40 inches of silty clay loam and silty clay (USDA 1979).

The glacial deposits which underlie the Urban land/Milford soils in the vicinity of the site consist of the Wadsworth Till Member of the Wedron Formation. The Wadsworth Till is a gray-clay and silty-clay till with some interbedded sand/gravel layers (Willman 1971). No site-specific stratigraphic information is available; however, based on well logs of the area, the glacial till is composed of a mixture of clay, sand and gravel deposits approximately 50 to 95 feet thick. The log for a well nearest to the site shows that the till thickness is approximately 55 feet. The bedrock underlying the glacial till in the vicinity of the facility is Silurian in age and mostly dolomite. The thickness of the Silurian dolomite deposits varies from 204 to 288 feet in the site vicinity based on the available well log information. Underlying the Silurian dolomite is the Ordovician shale, and beneath the shale are Cambrian and Ordovician limestone, sandstone, and shale (USGS 1985).

2.6.4 Groundwater

The glacial till deposits contain discontinuous sand and gravel beds containing perched water. This discontinuous aquifer is not recognized as a viable source of groundwater in the area. Eight well logs, for former municipal and industrial wells located in the area, were obtained from the Illinois State Geological Survey. These well logs indicate that the well depth varies from 1,500 to 2,000 feet and that groundwater was used from the Cambrian and Ordovician aquifer. This aquifer system extends from about 1,000 feet below ground surface (bgs) to about 2,200 feet bgs. Regional transmissivity values generally range between 10,000 gallons per day per foot (gpd/ft) and 20,000 gpd/ft (USGS 1985; Visocky, Sherril, and Cartwright 1985).

No facility-specific hydrogeological investigations are known to have been conducted. Assuming that the direction of groundwater flow follows local topographic features, regional groundwater flow is to the east toward the Des Plaines River (USGS 1972).

2.7 RECEPTORS

The facility occupies 16.5 acres in an industrial area in Melrose Park, Illinois. Melrose Park has a population of about 30,000 (PRC 1993).

The facility is bordered on the north by Polychem Corporation and Power Cleaning Systems, Inc., on the west by Schoeps Ice Cream and Keller Plastics, Inc., on the south by Melrose Park village hall, and on the east by Dur-o-Lite, Inc., Melrose Mold & Machine, and a Clark service station. The

nearest residence is located less than 0.1 mile east of the facility. Access to the facility is limited by an 8-foot fence. The facility also has security guards and an electronic alarm system.

The nearest surface water body, Addison Creek, is located 0.5 mile southwest of the facility and is used for recreational and drainage purposes. Other surface water bodies in the area include Silver Creek, which is located 0.75 mile northwest of the facility and is used for drainage purposes. The Des Plaines River is located 1.5 miles east of the facility and is used for recreation and drainage.

Groundwater is not used as a water supply. The nearest drinking water well is located more than 3 miles northwest of the facility. The Village of Melrose Park receives municipal water drawn from Lake Michigan and no wells are currently used as a source of water supply (PRC 1993).

Sensitive environments are not located on site. The nearest sensitive environment, a seasonally flooded palustrine system with emergent vegetation, is located 0.4 mile southwest of the facility (U.S. Department of the Interior 1981).

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the 13 SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and PRC's observations. Figure 2 shows the SWMU locations.

SWMU 1

Former CSA

Unit Description: This unit is located within a locked, 120-foot by 40-foot storage shed. The unit has an asphalt floor and corrugated steel walls. The unit does not have any floor drains.

Date of Startup: This unit was constructed in 1965 and waste storage activities presumably began at that time.

Date of Closure: This unit was RCRA closed in 1986. Closure was approved and RHC's Part A permit application was withdrawn by IEPA on March 10, 1987 (IEPA 1987b). The unit now manages nonhazardous waste paint sludge.

Wastes Managed: This unit managed waste paint sludge (D001) and TCA (F001) before 1985. Ultimate disposal of the waste paint sludge (D001) is unknown. TCA was recycled off site. Currently, nonhazardous waste paint sludge is managed in 55-gallon drums. Nonhazardous waste paint sludge generated at the facility is transported to Davis Junction in Rockford, Illinois by BFI.

Release Controls: This unit is located within a locked storage shed. The unit has an asphalt floor and corrugated steel walls. The unit does not have any floor drains.

History of Documented Releases: No releases from this unit have been documented.

Observations: The unit contained 32 55-gallon drums of nonhazardous waste paint sludge during the VSI. The drums were stored closed and in good condition. PRC observed small cracks in the floor. PRC observed some water on the floor (see Photograph Nos. 1 and 2). PRC noted no evidence of release.

SWMU 2 Paint and Solvent Waste Accumulation Areas

Unit Description: This unit consists of 5-gallon pails and 55-gallon drums located in the facility's paint department. The pails are located in three areas. When these are full, they are emptied into the 55-gallon drums in a fourth area. All four areas have concrete floors.

Date of Startup: This unit began operation when the facility began operating in 1958.

Date of Closure: This unit is active.

Wastes Managed: This unit manages waste paint and waste solvent which are flushed out of the spray painting lines during cleaning. The waste paint and waste solvent are managed in separate containers. Both are managed as nonhazardous wastes. The waste paint is transferred to the Former CSA (SWMU 1) where it is combined with still bottom and caustic stripper sludge wastes and designated as nonhazardous waste paint sludge. The waste solvent is transferred to the on-site distillation unit in SWMU 3 for recycling. The resulting still bottom waste is transferred to SWMU 1. Before 1985, this unit managed waste paint sludge (D001) and TCA (F001).

Release Controls: This unit is located on a concrete floor within the facility. PRC did not observe floor drains in the area.

History of Documented Releases: No releases from this unit have been documented.

Observations: The unit contained a total of nine partially filled 5-gallon pails and two 55-gallon drums of waste paint and waste solvent throughout the four areas. PRC observed some paint stains on the walls near the pails. The pails were maintained on cardboard. PRC did not observe any cracks in the floor. The containers were stored closed and were in good condition; however, paint stains were visible on the outside of the containers (see Photograph Nos. 3 and 4). PRC noted no evidence of release.

SWMU 3

Still Bottom SAA

Unit Description: This unit consists of a distillation unit and a 55-gallon drum. The unit is located in a shed attached to the facility's main building. Three walls of the shed are corrugated steel and one wall is brick. The drum is maintained on a diked, concrete floor. The shed is also used to store paint products.

Date of Startup: This unit began operation in 1989 when the distillation unit was added.

Date of Closure: This unit is active.

Wastes Managed: This unit manages still bottom waste from the recycling of waste solvent. The still bottom waste is transferred to the Former CSA (SWMU 1) where it is combined with the waste paint and caustic stripper sludge and designated as nonhazardous waste paint sludge. PRC contacted RHC's supplier of the solvent and found that the solvent contains toluene, methyl ethyl ketone, methyl isobutyl ketone, isopropyl alcohol, and butyl cellosolve. The percentage by weight of each of these compounds is 2 to 3 percent.

Release Controls: The unit is located indoors on concrete. The floor has a 3-inch dike.

History of
Documented Releases:

No releases from this unit have been documented.

Observations:

The unit contained one 55-gallon drum of still bottom waste during the VSI. PRC observed that the drum was stored closed and was in good condition. No cracks were observed in the floor. PRC, however, did note a heavy solvent odor in the room and, therefore, did not photograph the unit.

SWMU 4

Refuse Dumpster

Unit Description:

This unit consists of a 20-cubic-yard dumpster for general refuse and paint filters. The dumpster is located outdoors on the ground on the western side of the facility.

Date of Startup:

The unit began operation in 1958.

Date of Closure:

This unit is active.

Wastes Managed:

This unit manages general refuse, nonhazardous baghouse dust, and waste paint filters. This waste is transported to Davis Junction in Rockford, Illinois, by BFI.

Release Controls:

This unit has no release controls.

History of
Documented Releases:

No releases from this unit have been documented.

Observations:

The unit contained general refuse and waste paint filters during the VSI. PRC observed that the dumpster was in good condition (see Photograph No. 5). PRC noted no evidence of release.

SWMU 5**Plating Sludge Storage Room**

Unit Description: This unit consists of a 20-foot by 20-foot room with concrete block walls. The unit has concrete floors and no floor drains.

Date of Startup: This unit began operation in 1958 when the facility began operation.

Date of Closure: This unit is active.

Wastes Managed: This unit manages electroplating waste (F006) and electroplating sludge (F006) in 55-gallon drums on a less-than-90-day basis. These wastes are transported off site by Clean Harbors of Kingston, Inc., to Clean Harbors of Braintree, Massachusetts, for fuel blending.

Release Controls: This unit is located in a 20-foot by 20-foot room within the plating area of the facility. The walls are constructed of concrete blocks and the floor is concrete. Access to the room is limited by locked doors.

History of Documented Releases: No releases from this unit have been documented.

Observations: The unit contained eight drums of electroplating waste (F006) and electroplating sludge (F006) during the VSI. PRC observed that the drums were stored closed and in good condition, but they were not labeled. Stains were observed on the floor; however, there were no cracks or floor drains. PRC also noted that the drums of waste were not segregated from drums of raw materials. No lighting was available in the room so PRC was unable to photograph the unit. PRC noted no evidence of release.

SWMU 6**Trench System**

Unit Description: This unit consists of a series of concrete trenches located next to the plating lines. The trenches are covered with metal grates and discharge to the facility's sanitary sewer.

Date of Startup: This unit began operation in 1958 when the facility began operation.

Date of Closure: This unit is active.

Wastes Managed: This unit manages rinse water from the plating lines. Rinse water is discharged from the facility by way of the sanitary sewer.

Release Controls: The unit is located indoors and the trenches are made of concrete. The trenches lead to the sanitary sewer where the rinse water is electronically monitored for pH before being discharged. PRC did not observe any other floor drains in the area.

History of Documented Releases: No releases from this unit have been documented.

Observations: The unit contained rinse water during the VSI (see Photograph No. 6). PRC noted no evidence of release.

SWMU 7**Scrap Metal Gondola**

Unit Description: This unit consists of a 5-cubic-yard gondola for accumulating scrap metal. The gondola is located in the production area of the facility on a concrete floor.

Date of Startup: This unit began operation in 1958.

Date of Closure: This unit is active.

Wastes Managed: This unit manages nonhazardous scrap metal generated by the punching and machining of metal parts. Scrap metal is accumulated at SWMU 7 then transferred to the Scrap Metal Dumpster (SWMU 8) and emptied. The scrap metal is transported off site by Cozzi to its facility in Chicago, Illinois, for recycling.

Release Controls: The unit is maintained on a concrete floor inside the facility.

History of Documented Releases: No releases from this unit have been documented.

Observations: The unit contained scrap metal during the VSI (see Photograph No. 7). PRC noted no evidence of release.

SWMU 8 Scrap Metal Dumpster

Unit Description: This unit consists of two 20-cubic-yard dumpsters located in a loading dock bay. The bay is located within the facility with access to the outside available through overhead doors. The floor of the bay is concrete.

Date of Startup: This unit began operation in 1958.

Date of Closure: This unit is active.

Wastes Managed: This unit manages nonhazardous scrap metal accumulated in the Scrap Metal Gondola (SWMU 7). The scrap metal is transported off site by Cozzi to its facility in Chicago, Illinois, for recycling.

Release Controls: The unit is located indoors on a concrete floor.

History of Documented Releases: No releases from this unit have been documented.

Observations: Both dumpsters were approximately half full during the VSI (see Photograph No. 8). PRC noted no evidence of release.

SWMU 9 Waste Oil Storage Area

Unit Description: This unit is located indoors near the maintenance room. The unit consists of an area where 55-gallon drums are stored on wooden pallets.

Date of Startup: When the unit began operation is unknown.

Date of Closure: This unit is active.

Wastes Managed: This unit manages waste oil from fork lifts and production equipment. The waste oil is managed in 55-gallon drums on wooden pallets. Waste oil has not been disposed of for several years and the facility does not have an arrangement with a transporter or disposal facility.

Release Controls: This unit is located indoors on a concrete floor which had no cracks.

History of Documented Releases: No releases from this unit have been documented.

Observations: The unit contained 4 of the 15 55-gallon drums of waste oil during the VSI. PRC observed that the containers were labeled, stored closed, and were in good condition. However, the waste oil drums were not segregated from equipment and other drums containing raw materials (see Photographs No. 9 and 10). PRC noted no evidence of release. The 11 drums which were not at the SWMU were located throughout the facility.

SWMU 10**Former Incinerator**

Unit Description: This unit consisted of a former incinerator located outdoors on a concrete pad. No other information was available from the facility representatives.

Date of Startup: The facility representatives could not provide the date when the unit began operation.

Date of Closure: This unit was removed in 1972.

Wastes Managed: This unit managed paper and cardboard waste generated at the facility.

Release Controls: The unit was located on a concrete pad.

History of Documented Releases: No releases from this unit have been documented.

Observations: The unit contained some scrap metal debris during the VSI (see Photograph No. 11). PRC noted no evidence of release.

SWMU 11**Evaporators**

Unit Description: This unit consists of aboveground tanks located at each plating line. The tanks are constructed of polypropylene, one has a steel outer tank. The evaporators run continuously to treat waste plating solutions by removing water and concentrating Ni-Cr and Zn-alkaline plating solutions. The facility representatives could not provide a flow rate. Both evaporators are located over a concrete surface. Exhaust from the evaporators is drawn into the plating system's ventilation system. This system is operated under an air permit.

Date of Startup: This unit began operation in 1988.

Date of Closure: This unit is active.

Wastes Managed: This unit treats waste plating solutions from both plating lines.

Release Controls: The evaporators are hard piped to the plating lines.

History of Documented Releases: No releases from this unit have been documented.

Observations: This unit contained plating solution during the VSI (see Photograph No. 12). PRC noted no evidence of release.

SWMU 12 Former Cyanide Destruction Tank

Unit Description: This unit consisted of a 1200-gallon steel tank used for cyanide destruction. The unit was located on a concrete floor in the plating area. The facility's Part A permit application indicates a 4,000 gallon per day capacity (RHC 1980b).

Date of Startup: The date the unit began operation is unknown.

Date of Closure: This unit has been inactive since 1988, presumably, when plating solutions containing cyanide were eliminated. The facility representatives could not provide information regarding the removal of the unit.

Wastes Managed: This unit managed cyanide-containing rinse water. Sodium hypochlorite was used to destroy the cyanide. No other information is available regarding waste disposal.

Release Controls: The unit was located on an unbermed concrete floor. Possible releases from this unit would have flowed into the Trench System (SWMU 6).

**History of
Documented Releases:**

No releases from this unit have been documented.

Observations:

The unit did not exist at the time of the VSI. PRC noted no evidence of release (see Photograph No. 13).

SWMU 13

Baghouses

Unit Description:

This unit consists of three baghouses located throughout the facility and one baghouse on the roof of the facility. The baghouses are managed under the facility's operating air permit.

Date of Startup:

This unit began operation in approximately 1988.

Date of Closure:

This unit is active.

Wastes Managed:

This unit manages dust from the polishers and grinders in the facility. Dust from the baghouses is transferred to the Refuse Dumpster (SWMU 4) for disposal at Davis Junction in Rockford, Illinois, by BFI. The unit generates less than one 15-gallon pail of dust each month.

Release Controls:

The unit operates under an air permit. Dust is collected in the baghouses and is emptied into pails once per month. Three of the baghouses are located indoors on concrete.

**History of
Documented Releases:**

No releases from this unit have been documented.

Observations:

The unit was in operation at the time of the VSI. Three of the baghouses were maintained on concrete which had no floor drains (see Photograph No. 14). PRC noted no evidence of release.

4.0 AREAS OF CONCERN

PRC identified two AOCs during the PA/VSI. These AOCs are discussed below; their locations are shown in Figure 2.

AOC 1 Fuel Oil UST

This unit consists of two 20000-gallon steel USTs which held fuel oil for the facility boilers. The USTs were also used to store product solvent (unspecified). When solvent was stored in the USTs, water entered the tanks through a manhole-like cover. Also at about that time, the facility reduced the quantity of solvent needed for production, so the USTs were closed in 1986.

PRC reviewed a purchase order between RHC and American Waste Processing, Ltd., for UST work that included removal and disposal of waste liquids, tank cleaning, filling with pea gravel, and refinishing of concrete floors (RHC 1986). A Certificate of Cleaning from New Process Tank Systems of Brookfield, Illinois, was issued for two 20000-gallon tanks. The waste liquid removed from the tanks was manifested as tank cleaning water (D008) and flammable liquid (D001). Pressure testing and soil sampling were not indicated on any documents reviewed by PRC. Also, disconnection of inlet and outlet pipes was not indicated. American Waste Haulers transported 12,000 gallons of tank cleaning water (D008) to ChemClear in Chicago, Illinois, for fuel blending. SET transported 31,100 gallons of flammable liquid (D001) to LWD in Calvert City, Kentucky, for fuel blending.

AOC 2 Paint Room UST

This unit consists of one 1100-gallon, steel, emergency UST which was designed to hold flammable nitrocellulose lacquer. An on-ground lacquer dipping tank could empty into AOC 2 in the event of a fire within the facility. The facility never experienced a fire emergency; however, the facility representatives could not confirm that the UST was never used. The facility stopped using the nitrocellulose lacquer and therefore no longer needed the UST. This UST was closed in place in

approximately 1986 when it was filled with pea gravel. No closure documents were available for this UST.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified 13 SWMUs and 2 AOCs at the RHC facility. Background information on the facility's location; operations; waste generation and waste management; history of documented releases; regulatory history; environmental setting; and receptors is presented in Section 2.0.

SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. AOCs are discussed in Section 4.0. Following are PRC's conclusions and recommendations for each SWMU and AOC. Table 3, located at the end of this section, summarizes the SWMUs and AOCs at the facility and the recommended further actions.

SWMU 1 Former CSA

Conclusions: The unit is located indoors, has an asphalt floor, and does not have floor drains. The unit now manages nonhazardous waste. The potential for release to all environmental media is low. The unit underwent RCRA-closure after managing hazardous waste. However, the waste currently managed at this unit may be improperly characterized.

Recommendations: PRC recommends no further corrective action for this SWMU at this time. PRC recommends that EPA request a proper waste analysis of the waste paint sludge which is managed as nonhazardous.

SWMU 2 Paint and Solvent Waste Accumulation Areas

Conclusions: This unit is located indoors and manages waste paint and waste solvent in 5-gallon pails and 55-gallon drums. These wastes are managed as nonhazardous waste. The potential for release to all environmental media is low because the unit is located indoors, on concrete, in containers which are stored closed and in good condition. The solvent waste may be improperly characterized.

Recommendations: PRC recommends no further corrective action for this SWMU at this time.
PRC recommends that EPA request a proper waste analysis of the waste managed in this SWMU.

SWMU 3 Still Bottom SAA

Conclusions: This unit consists of a 55-gallon drum located in a shed attached to the facility's main building. The potential for release to groundwater, surface water, and on-site soils is low because the unit is located on a diked, concrete floor. The potential for release to air is moderate. PRC observed a strong solvent odor in the shed during the inspection. It is possible that emissions from the distillation unit associated with this SWMU is in violation of the air permit.

Recommendations: PRC recommends that EPA request a proper waste analysis of the still bottom waste. Ventilation in this room should be investigated to determine if VOC emissions are within the operating air permit guidelines.

SWMU 4 Refuse Dumpster

Conclusions: This unit consists of a 20-cubic-yard dumpster located outdoors. The potential for release to groundwater, surface water, and on-site soils is low because the unit manages nonhazardous waste. The potential for release to air is moderate. Baghouse dust placed in this unit may contain hazardous constituents which could become airborne if not contained.

Recommendations: PRC recommends that baghouse dust placed in this unit be contained.

SWMU 5 Plating Sludge Storage Room

Conclusions: This unit manages electroplating sludge (F006) and electroplating waste (F006) in containers on a concrete floor with no drains. The potential for

release to all environmental media is low because the unit is located in a locked room within the facility. Containers are maintained in good condition.

Recommendations: PRC recommends that all drums of hazardous waste be labeled and segregated from containers of product. The room should have adequate lighting.

SWMU 6 Trench System

Conclusions: This unit consists of a series of concrete trenches located next to the plating lines. The potential for release to all environmental media is low because the unit is located indoors and the nonhazardous wastewater managed in this unit is discharged to the sanitary sewer after being electronically monitored.

Recommendations: PRC recommends no further action for this SWMU at this time.

SWMU 7 Scrap Metal Gondola

Conclusions: The unit consists of a 5-cubic-yard dumpster used to accumulate scrap metal from the production area. The potential for release to all environmental media is low because the unit is located indoors on a concrete floor and manages nonhazardous waste.

Recommendations: PRC recommends no further action for this SWMU at this time.

SWMU 8 Scrap Metal Dumpster

Conclusions: This unit consists of two 20-cubic-yard dumpsters which manage scrap metal from the Scrap Metal Gondola (SWMU 7). The unit is located in a loading dock bay. The potential for release to all environmental media is low because it manages nonhazardous waste and is located indoors on concrete.

Recommendations: PRC recommends no further action for this SWMU at this time.

SWMU 9 Waste Oil Storage Area

Conclusions: This unit manages waste oil in 55-gallon drums on pallets. The potential for release to all environmental media is low because the drums are maintained indoors, on concrete, and were in good condition.

Recommendations: PRC recommends that waste management be improved by keeping all the drums and pallets segregated from equipment and other drums and by keeping all full drums in the area.

SWMU 10 Former Incinerator

Conclusions: This unit consisted of a former incinerator located outdoors on a concrete pad. The potential for release to all environmental media is low because the unit managed nonhazardous waste and was removed in 1972.

Recommendations: PRC recommends no further action for this SWMU at this time.

SWMU 11 Evaporators

Conclusions: This unit consisted of aboveground tanks located at each plating line. The potential for release to all environmental media is low because the units are located indoors, over concrete, and are hard piped to the plating lines. Also, the unit is operated under an air permit.

Recommendations: PRC recommend no further action for this SWMU at this time.

SWMU 12 Former Cyanide Destruction Tank

Conclusions: The unit consisted of a 1200-gallon steel tank located on concrete in the plating area. The potential for release to all environmental media is low because the unit no longer exists.

Recommendations: PRC recommends no further action for this SWMU at this time.

SWMU 13 Baghouses

Conclusions: The unit consisted of four baghouses associated with the facility's polishers and grinders. The potential for release to all environmental media is low because the units are operated under an air permit and are well maintained.

Recommendations: PRC recommends no further action for this SWMU at this time.

AOC 1 Fuel Oil USTs

Conclusions: This unit consists of two 20000-gallon USTs constructed of steel, which were closed in place in April 1986. The unit held fuel oil until the facility began using natural gas in the boilers, and then the USTs held product solvent. When the facility reduced the quantity of solvent needed for production and when water entered the USTs, they were closed.

Groundwater: The potential for release is moderate. Available documents do not indicate that the USTs were tested for leaks before closure. The facility closed the unit because water entered the USTs contaminating the product solvent.

Surface Water: The potential for release is low. Groundwater in the area is not likely to impact surface water because of the distance to the nearest surface water.

Air: The potential for release is low. This unit is located within the boundaries of the facility's building and is covered by concrete.

On-Site Soils: The potential for release is moderate. Available documents do not indicate that soil samples were collected during the closure of this unit. Also, available documents do not indicate whether associated piping was removed during the UST closure.

Recommendations: PRC recommends that documentation of closure be obtained from the State Fire Marshall or appropriate regulatory agency. If documentation is not available, or does not demonstrate that releases did not likely occur, soil sampling should be conducted.

AOC 2 Paint Room UST

Conclusions: This unit consisted of an 1100-gallon steel UST designed to hold flammable nitrocellulose lacquer which could be drained from an on-ground dipping tank in the event of fire. The unit was closed in place when the facility discontinued use of the nitrocellulose lacquer. No fires have occurred at the facility; however, the facility representatives could not confirm that the UST was never used. The potential for release to surface water and air is low because of the distance from the facility to surface water and the unit is located within a building under a concrete floor.

The potential for release to groundwater and on-site soils is moderate because the UST was closed in place when it was filled with pea gravel. Closure documents are not available for this unit; therefore, it is unknown whether or not testing for leaks was conducted, associated piping was removed, or soil sampling was conducted as part of closure.

Recommendations: PRC recommends that closure documentation be obtained, if available. If closure was not documented, or if closure documents do not show that releases were not likely to occur, soil sampling should be conducted.

TABLE 3
SWMU AND AOC SUMMARY

<u>SWMU</u>	<u>Dates of Operation</u>	<u>Evidence of Release</u>	<u>Recommended Further Action</u>
1. Former CSA	1965 to present	No	Request waste analysis
2. Paint and Solvent Waste Accumulation Areas	1958 to present	No	Request waste analysis
3. Still Bottom SAA	1989 to present	No	Facility should improve ventilation to reduce solvent odor and EPA should request waste analysis
4. Refuse Dumpster	1958 to present	No	Manage baghouse dust in containers
5. Plating Sludge Storage Room	1958 to present	No	Label and segregate all waste drums and have adequate lighting
6. Trench System	1958 to present	No	No further action
7. Scrap Metal Gondola	1958 to present	No	No further action
8. Scrap Metal Dumpster	1958 to present	No	No further action
9. Waste Oil Storage Area	Unknown to present	No	Improve waste management and maintain all waste oil in this area
10. Former Incinerator	Unknown to 1972	No	No further action
11. Evaporators	1988 to present	No	No further action
12. Former Cyanide Destruction Tank	Unknown to 1988	No	No further action

TABLE 3
SWMU AND AOC SUMMARY (Continued)

<u>SWMU</u>	<u>Dates of Operation</u>	<u>Evidence of Release</u>	<u>Recommended Further Action</u>
13. Baghouses	1988 to present	No	No further action
<u>AOC</u>	<u>Dates of Operation</u>	<u>Evidence of Release</u>	<u>Recommended Further Action</u>
1. Fuel Oil USTs	Unknown to 1986	No	Obtain documentation of closure from the State Fire Marshall; sample surrounding soil, if necessary
2. Paint Room UST	Unknown to 1986	No	Obtain documentation of closure from the State Fire Marshall; sample surrounding soil, if necessary

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APPENDIX A
VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS
(Nine Pages)

VISUAL SITE INSPECTION SUMMARY

Reflector Hardware Corporation Spacemaster
1400 N. 25th Avenue
Melrose Park, IL 60160
ILD 005 129 457

Date: June 9, 1993

Primary Facility Representative: Jerry Kuykendall, Area Superintendent
Representative Telephone No.: 708/345-2500
Additional Facility Representatives: Darrel Hutchens, Finishing Manager

Inspection Team: Gabrielle Norkis, PRC Environmental Management, Inc.
(PRC)
Judith Wagner, PRC

Photographer: Judith Wagner, PRC

Weather Conditions: Sunny, calm, 70 °F

Summary of Activities: The visual site inspection (VSI) began at 9:20 a.m. with an introductory meeting. The inspection team explained the purpose of the VSI and the agenda for the visit. Facility representatives then discussed the facility's past and current operations, solid wastes generated, and release history. Facility representatives provided the inspection team with copies of requested documents.

The VSI tour began at 11:25 a.m. PRC toured the facility's plating area first, observing the Trench System (SWMU 6), the location of the Former Cyanide Destruction Tank (SWMU 12), and the Plating Sludge Storage Room (SWMU 5). PRC then toured the central storage area and observed the Waste Oil Storage Area (SWMU 9) and noted the general area of the Fuel Oil Underground Storage Tanks (UST) (AOC 1). PRC then toured the production area observing the Scrap Metal Gondola (SWMU 7) and Scrap Metal Dumpster (SWMU 8). PRC observed the vapor degreaser which is no longer used. Next, PRC toured the facility's painting area, including the spray booths and paint lines. PRC observed the Paint and Solvent Waste Accumulation Areas (SWMU 2) and noted the area of the Paint Room UST (AOC 2). PRC then observed the Refuse Dumpster (SWMU 4) located outside of the building. PRC toured the packaging, assembly, and finished stock storage areas, then observed the Former Container Storage Area (SWMU 1) located in the storage annex building. PRC observed the location of the Former

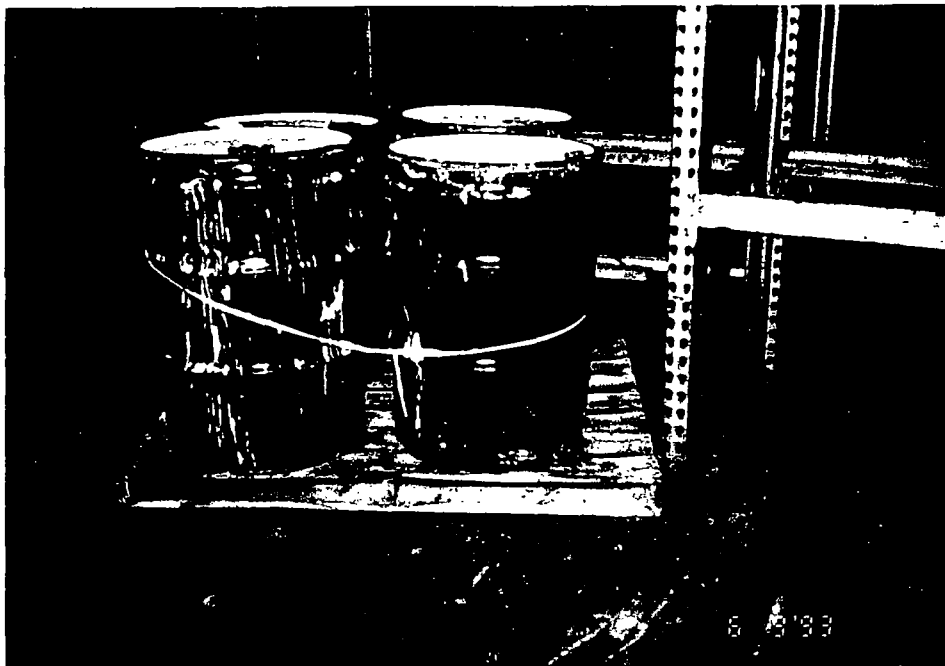
Incinerator (SWMU 10). Lastly, PRC observed the Still Bottom Satellite Accumulation Area (SWMU 3).

The tour concluded at 1:00 p.m., after which the inspection team held an exit meeting with facility representatives. The VSI was completed and the inspection team left the facility at 1:10 p.m.

Date:

August 16, 1993

PRC returned to the facility to obtain additional information regarding the Evaporators (SWMU 11) and to photograph the Baghouses (SWMU 13). PRC was on site at 8:30 a.m. and left the facility at 9:45 a.m.



Photograph No. 1

Orientation: South

Description: Drums of nonhazardous waste paint sludge managed in the Former CSA (SWMU 1).

Location: SWMU 1

Date: June 9, 1993



Photograph No. 2

Orientation: West

Description: Drums of nonhazardous waste paint sludge managed in SWMU 1.

Location: SWMU 1

Date: June 9, 1993



Photograph No. 3

Orientation: East

Description: Paint and Solvent Waste Accumulation Areas (SWMU 2) with 5-gallon pails to collect waste paint and waste solvent.

Location: SWMU 2

Date: June 9, 1993



Photograph No. 4

Orientation: South

Description: SWMU 2 with two 55-gallon drums to accumulate waste paint and waste solvent.

Location: SWMU 2

Date: June 9, 1993



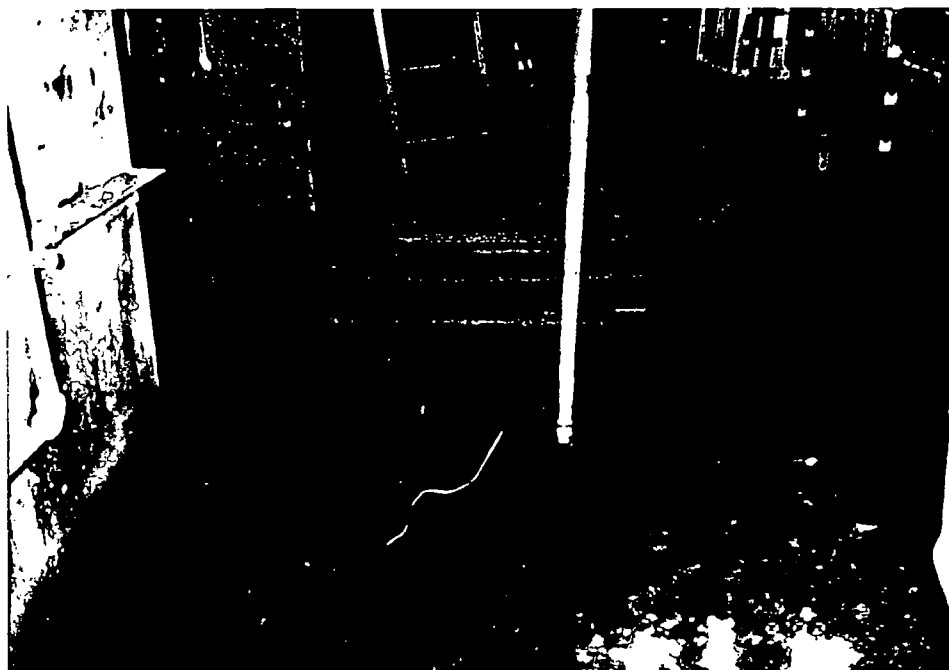
Photograph No. 5

Orientation: West

Description: Refuse Dumpster (SWMU 4) which manages refuse and nonhazardous waste paint filters.

Location: SWMU 4

Date: June 9, 1993



Photograph No. 6

Orientation: East

Description: Example of Trench (SWMU 6) in the floor of the plating area. Trench is covered with a metal grate.

Location: SWMU 6

Date: June 9, 1993



Photograph No. 7

Orientation: South

Description: Gondola used to accumulate scrap metal in the production area.

Location: SWMU 7

Date: June 9, 1993



Photograph No. 8

Orientation: East

Description: Dumpster used to collect scrap metal accumulated in SWMU 7.

Location: SWMU 8

Date: June 9, 1993



Photograph No. 9

Orientation: East

Description: Two drums of waste oil; drums are numbered #2 and #3.

Location: SWMU 9

Date: June 9, 1993



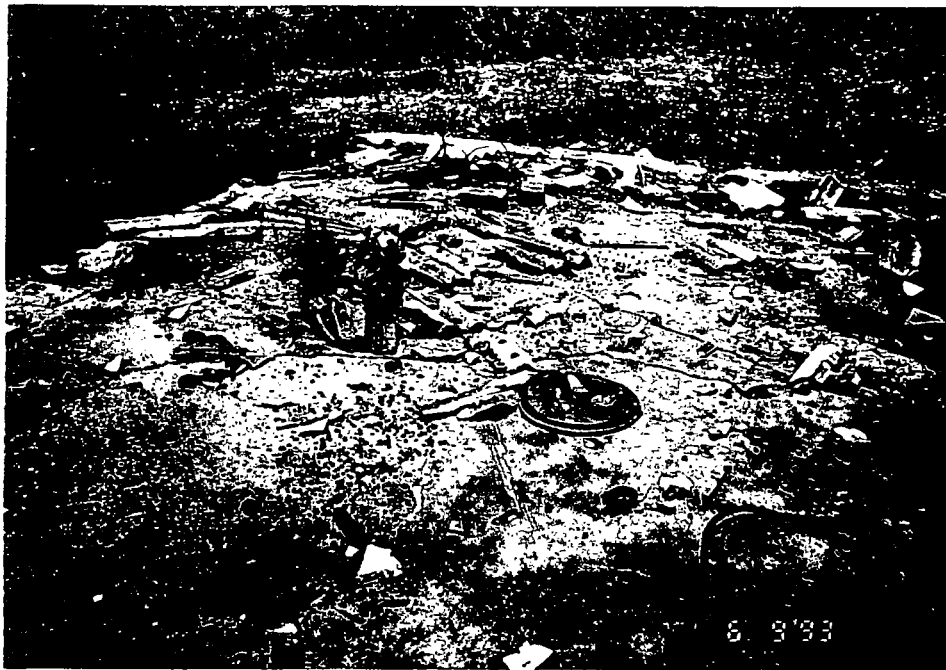
Photograph No. 10

Orientation: West

Description: Two drums of waste oil. One drum has a #1 marked on it and the second drum is in the background and is painted blue. Note the poor housekeeping.

Location: SWMU 9

Date: June 9, 1993



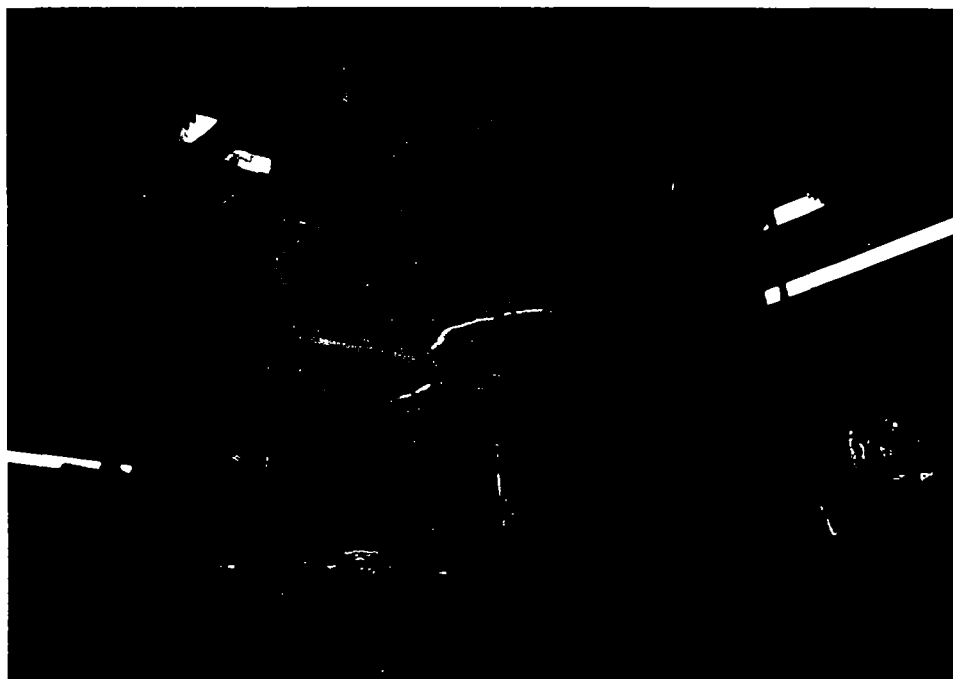
Photograph No. 11

Orientation: West

Location: SWMU 10

Date: June 9, 1993

Description: A Former Incinerator (SWMU 10) was located on this concrete pad before 1972.



Photograph No. 12

Orientation: North

Location: SWMU 11

Date: June 9, 1993

Description: Evaporator (SWMU 11) associated with the zinc plating line.



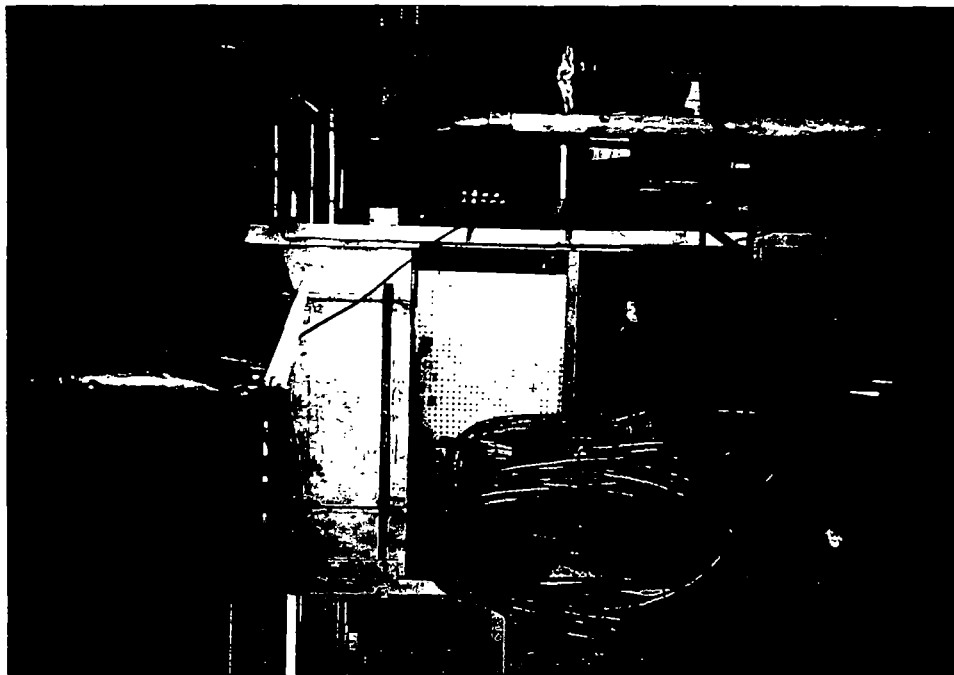
Photograph No. 13

Orientation: East

Description: Area where Former Cyanide Destruction Tank (SWMU 12) was located.

Location: SWMU 12

Date: June 9, 1993



Photograph No. 14

Orientation: South

Description: Baghouse (SWMU 13) associated with polisher in the facility's production area.

Location: SWMU 13

Date: June 9, 1993

APPENDIX B
VISUAL SITE INSPECTION FIELD NOTES

16 RHC Spacemaster

PA/USI

06/09/93

PRC

Inspectors: Judy Wagner
Gabby Norvis ^{Lead}

Arrival ^{time} on site: 9:20

Sunny, calm, 70°F

RHC Rep: Jerry Kuykendall,
^{Area} Superintendent

Manufacturing ^{JKW}

History - dates are approximate

1957 begun operation

new construction

moved from CH - Western Ave.

~ 16 acres bldg on property

→ Ck plat

6/9/93

RHC Spacemaster

17

1957 - Mtg, store fixtures
metal

- machined, plated, painted
waste management - unknown

In past, ZN/CN, nickel, copper,
etc. Chromium

- Automatic, hand line,
barrel line

Now - most plating ^{JKW} ~~done~~
done outside facility

ZN/CN-free plating, ^{now} none

When?

Ni/Cr, Zn bodylite

- 2 auto plating lines - now

Stripping - no longer done -

bad parts are scrapped

18

RHC Spacemaster 4/9/93

Paint waste

Past - drummed + shipped

^{Paint}
Solvent was distilledNow - solvent used to
clean paint lines, distilled
on-siteHigh solids paints now
usedPaint sludge including filters
is drummed (nonhaz)
accumulate ~60⁷⁰ drums
per year

BFI - shipper

BFI - landfill = Davis
Junction, Rockford

RHC - Spacemaster 19

Solvent~~SAA~~

Solvent management plan

SAA - 5 gal pail at
paint linesPails taken to distillation
unit.Still bottom waste combined
w/ nonhazardous paint
sludge- No waste analysis on
still bottomStill - approximately 1989
began usePrior to 1989 - ^{solvent} stored on site
in 55-gal drums

20

RHC Spacnaster

Solvent (pre onsite still)
disposal + recovery unknown

Painting Since 1957

Plating

1988 - eliminated CN plating
1986 - barrel plating

Fabrication

mostly cold rolled sheets
or coils → stamped →
(may be machined) →
painting or plating

4/9/93

RHC

21

2 lines now (see diagram)

1. Zn-alkaline system
plating bath
w/ 3 stations, 2 for alkaline
1 for rinse

Acid baths → pre-Envirite
probably neutralized
= w/ ^{drummed} + shipped
off-site. Destination is
unknown

Now use Envirite

Also, Zn-CN bath (in past)
pumped to concrete pit,
solids were allowed to
settle ^{slw} out, clear liquid
back to plating bath +
solids drummed → off-site.
↳ by tank cleaner

22

RHC

4/9/93

#2 Automatic Plating
Ni-plating
may use Ni-Cr

Ni-filter - disassembled
for cleaning. Filters =
bags which are drummed
+ shipped

cleaned → Every 2-3 month

Average 2 ^{drums}

Drums stored: in room
near plating line

Trans Clear Harbor
in MASS Braintree

see manifest:

Electro waste - filters

" Sludge - tank
bottoms

4/9/93

RHC

23

Drums of sludge to same
room as drums of filters.

Facility Rep: Darrell Hutchens,
Finishing mgr

Water from Ni-line:
2 evaporators

MSD monitors continuously
- facility does not discharge
rinse water to MSD

Freq.: of tank cleaning

Ni-

Acid - once/yr w/2 max

Zn-

Cleaner - once/yr

Cr-

24

RHC

SW
3 6/9/93

Storage Room -
capacity
yrs operation

vapor
Former Degreaser

(parts cleaner) one time
generation of TCE (P001)
Use: to remove oil coating
from small parts
approx 4' x 16" tank, steel
built in still in unit
⇒ Sludge (Still bottom)
removed by scraping
into buckets ⇒ drummed &
managed
TCE added, never replaced

RHC

25

Still bottom

1 Drum

not stored onsite
removed once / 2 years
by ? unknown

Clean Harbors did final
pump out + disposal
End operation: after 12/10/91
Closed 11/92

Facility reps were (704)
unaware of any WWTs
on-site, now or in past.
However, Line #1 did have
a neutralization system w/
water to sanitary sewer.

26

RHC

North - Several ^{small} ~~large~~ factories
 South - Melrose Park Village Hall

East - new construction
 West - Clark Gas station

Security: Usually, 100% fence
 w/ 8' cyclone - some openings
 now on west side because of
 construction.

Guards ~~off after hours~~ ^{JW}
 + during 1+2 shift
^{JW} ~~ADF~~ - for after hours
 Security Link = plant security

Employees - 200
 Primarily 1 shift
 5 days/week

27

Water Supply -
 Bought from CH
 Private wells - no known

Water Discharge -
 no permit

Air - operating permit

(Incinerator - burn paper)
 pre-1974/2
 JW

Nearest Residence -
 1/2 to one block east

28

RHC

1951-

subsidiary of Spacemaster

^{sw}
G Darcy Corporation

owned by RHC

bought in '71 or '72

Swamp - before building

Storm sewers } not
Sanitary " } connectedStorm to village's main
storm system

Sanitary - see maps

RHC

29

Slugs + drop offs from
metal punching -
collected in Dumpsters
resold to scrap hauler
Cozy ScrapOil → no free liquid
all oil stays w/ ^{scraps} partsMaintenanceforklift oil changes
bad batteries now, no gas
oil stored in drums (H on site)
1:1 exchange on batteries

30

RHC

USTs2x 10,000 gal
each

fuel oil - for boilers

• cleaned

2x 20,000 gal

Steel

then stored solvent

discontinued use but it

filled w/ water - so

UST was closed in place

filled w/ pea gravel

Paint Room UST

Nitrocellulose lacquer - flammable

1,100 gal - this tank
was designed to hold lacquer in
emergency - in case of fire -out of service - filled in
place w/ pea graveltank in production would
dump to UST

6/9/93

RHC

31

SW

One above
on ground tank
HCL product11:25 facility tour

Zinc line

Photo 1 (#6)

East / southeast

1,200 gal

location of

steel

former WW tank for Zn line

86 drums on-site of plating
sludge (FOO 61748)
(probably)Observed water trenches
around plating lines#2 East trench rinse water
water

32

20 x 20 concrete block room
w/ 8 drums of sludge
drums unlabeled
Floor stained, drums closed,
good condition
mix of products & waste

Ni-cr line -

Nickel filter -

Photo #3 East

- walked thru boiler room
Central Storage Area - ^{north} end
of bldg
west wall

4 ^{new} drums accumulating
waste oil

Photo #4 West 4 #5
oil drums

33

Photo #6 (12)

East Former Fuel Oil UST
location of

Photo #7 Scrap metal
Collection (#1)

East 2 two 10-15 cubic
yard
partially full dumpsters

Photo #8 (13 or 14)

South ^{satellite} accumulation
for scrap metal (contains
oil)

Observed punch press area
+ former degreaser

Photo #9 (14)

West
Former degreaser

①

Terry Kuyendall
Darnell Hutchens

9:30

1957- Refector built
building + moved in
its approximately 16 acres.

manufactured metal store
fixtures. Had plating
dept, paint, machining.

don't know how wastes
handled.

Zn cyanide

nickel Cr.

Zn cyanide

} plating

②

had 2 plating lines plus
a barrel plating line.

- Have eliminated ~~of~~ zinc
cyanide plating. elim. in
1988
- Have eliminated stripping
processes. 1988.

have a nickel chrome line
only

Painting wastes
Generated formerly +
currently:

① Paint sludge - always
drummed

② Solvent wastes - used to be sent for distilling

③ Paint filters

currently distill solvents
and for cleaning spray guns.

Currently:
paint sludge, ~~is drummed~~
solidify filters is
drummed + stored in
Storage annex building
about 70 drums per
year. By BRT to
Davis Junction Site in
Rockford.

waste solvent is
accumulated in one
55 gal (5 gallon drum).

Solvent still bottoms
are drummed

+ put into Storage building
+ sent to BFI landfill.
determined non-haz. by
gen. knowledge

Solvent still in use in
1989.

Prior was stored >
90 days + then put out
for distilling.

Limited painting app.
started in 1957.

Plating info.

Start w/ cold rolled steel.
Coiled or sheet.
Stamp Stamp it.

Goes to punching, forming
drilling.

Goes to plating lines
1st

- ① have alkaline cyanide
free zinc plating bath
- ② goes to 2 alkaline
cleaning tanks.
- ③ looked at flow
diagram.

Currently have
Environ~~to~~ come in and
drain acid & zinc
tank.

Before and to drain
zinc & acid tank. Sludge
remaining would get drummed
& shipped. the liquid was

returned.

Automatic plating
line is a Nickel/Chrome
line.

have a nickel filter.
Clean there. Gr. filter
& sludge. Gr 2 drums
every 3 months. Stored
in room by line. Taken
by Chem Harbor to in
Braintree, Ma.

All sludges are removed
from tanks & taken to
Chem Harbor.

For acid hydrate.
sludge so Enclinto
can take it.

All sludges from tanks
are stored in plating storage
room.

Water is not discharged
from plating lines. It's
evaporated thru zinc or chrome.
or nickel is reused.

on nickel line used to
have a Sep. tank to
hold ~~it~~ water down &
then reusing nickel.

Acid tanks on nickel
line get drained once a
year.

used to have a
parts department. Used
to store a 4 by 16
steel tank. Used to
remove still bottoms
about every 2 years.
These were removed &
drummed & taken out
immediately by drum
handlers.

Last shipment 1992.

Stopped using it in 12/10/91
regulated as gen. only

As far as fac. reps
know, this facility has
never had a UWTB.

N -
S - Melrose Park Municipal
Building
W -
E - Gas Station

Originally surrounded by
8 ft. cyclone fence.
Back fence knocked down
because of neighbor court.
service

"Security" after building
after closing "Security Lock"
Have guard on duty
1st & 2nd Shift.

around 200 people; 160
people 2 shifts (4 people)
5 days a week.

City water.

no water Discharge
Permits.

Across the street closet
houses.

1957- Reflector Hardware
Subsid. of
Spacemaster.

1971-1972 → Bought D'Arcy
Corp. + ship out
under their name.

Main Storm sewer system
discharges to Ruben
Park System

Son. goes to Village System.

On punch press machine
gr. metal chips covered w/oil.
put into gondola
& sold to put into
large dumpster & sold
to Coyy Scrap Recyclers.

~~Waste~~ Do maintenance
of heavy machine.

Stored in drums.
Reused mostly but some
stored.

Recycle all batteries.

Used to have incin.
for domestic trash only.
~~that~~ Out of use since
1972.

Had a fuel oil tank.
for boilers. then used
for solvent storage.

~~that~~ was empty at
but filled up w/ g.w.
so filled in. 10,000 gals.
2 tanks. steel construction.

in paint room used
to have a liquor dipping
tank. there was a tank
underneath to catch
liquor in case of fire.

About 1,000 gal. filled
w/ gravel.

Have on above ground
tank for product HCL.

begin inspect. ~~at~~ 11:30

photo 1 → area of former
NW tank from zinc
line. water discharged
here. E-southeast
1200 gal, steel.

no light in drum storage
area for plating. 8 drums.
20x20 inches
white walls. Stained floors, no
cracks.

photo 2 - trenches for
rinsing NW on zinc line.
goes to son. sewer.
East.

photo 3 - nickel filter E.

photo 4 - central
Storage area used
oil storage. West.

photo 6 - former fuel oil
USTs. E.

photo 7 - Scrap Metal
Dumpsters - Conry
927-66-11 E

photo 8 - SAA Scrap Metal
on punch lines - S

photo 9 - former degreaser W

photo 10 - 5 gal solvent
bucket on paint line
E.

work part bucket

photo 11 - paint sludge SAA
2 areas like this.
Goes out with.

photo 12 - one of former degreaser
UST. W. 1100 gal steel

photo 13 - B&E 20 in yard
dumpster where paint
filters go W

photo 14 - W - former storage
Area. Currently hor-
iz. paint work sludge
containers still located from
solvent still.

photo 15 - S - same

photo 16 - NW former
Incinerator, Act of
Commission 1972.

Paint hanger placed in
caustic stripper. Waste
is not out w/ waste paint
as non-haz.

N - Polyphor, Power Cleaning
Systems, Inc.

N - Schepke Ice Cream

SE - Melrose Pk. Village Hall

E - Forest Electric

Opt. Buildings

Duro - O - Lite Inc.

Melrose Mold & Machine

58

08/16/93

Reflector Hardware Corp.

CN 5116 8:30 am

RHC Rep: Darrel Hutchens

RHC J. Wagner

Evaporators

2 Ni line & Zn line
 on Ni - right from Ni soln
 on Zn - from dragout tank
 → run continuously - flow

Capacity

Ck w/ John E.

Ni -

} unknown

Zn -

} rate unknown

Heated to Evap.
 In use since 1988

JLW

59

JLW

~~Waste~~ ~~at~~ Before '88 -
 recycled/recirculated w/in
 system

Photo #1 North/upward

Zn plating line Evap.

Concrete floor w/ trenches, no
cracks

Evaporators -

Polypropylene lined
steel tank

over 2" containment

*Rinse water - plain H₂O
 to MSD which is continually
 monitored

Dust Collector on roof
 4 total - for metal etc
 from grinders. Cleaned once
 per month - to dumpster

JLW

60

RHIC

started about 5 yrs
ago

Generates

SW ~~5~~ Equivalent = 12 gal
per month

Waste Oil

years of collection
no routine disposal
in place at time - 15 drums
found during cleanup

Photo in South

Bagnouse

largest one on roof

clean out port
unit on concrete -
some cracks no drains

LKW

8/16/93

61

Received UST reports

off site ~ 745

LKWagner